

**FEATURING BEST PRACTICES  
OF STATE AGENCIES AND INSTITUTIONS OF THE  
COMMONWEALTH OF VIRGINIA**

**Manage Information Technology Solutions:  
A Risk Managed and Business Process Approach  
to Information Technology Development  
and Implementation Projects**

**Department of Rehabilitative Services**

**implemented this best practice  
on August 1997**

*Qualifying under the  
Best Practices catalogue*

3 Provide Capabilities  
31 Manage resources and capabilities  
312 Deliver products and services to customers

**Best Practice Summary  
(how it works, how you measure it)**

The Disability Services Agencies (DSA) Y2K Project used a risk management approach to Y2K Activities. The first step in the Y2K Project was to define a Business Process Record (BPR) as an agency activity that was supported in some manner by Information Technology (IT). Prioritization of BPRs with respect to agencies' missions and critical supporting activities provided one metric to determine the priority of project activity. An estimate of the probability of failure during Y2K turnover cycles was a second metric used to determine the priority of project activity. For each business process, data were collected to allow planning and progress reporting for the Y2K Project.

The BPR database has a business process record table. This table will be used in future systems development efforts. It is a tangible artifact of the Y2K Project that is useful in both completing contingency planning (for Y2K and non-Y2K scenarios) and future applications systems development.

Three elements form a BPR; a platform, application and trigger. Each supports an agency business process. There is a lead and an owner for each BPR. The lead is the IS Division analyst responsible for support of the trigger. The owner is the staff person responsible for the business process. Three elements require risk assessments. Priority is the extent to which the supported business process is essential to the mission of the organization. Severity is the probability of failure due to Y2K. A third element is whether or not a trigger is mission critical. These risk assessments are decided by functional program management and IT staff. The remaining elements of the BPR table contain information for renovation, testing, implementation and contingency planning categories. Each category has deadlines for completing plans, completing the activities of a category and percent completion rate.

Quantifiable evidence of completion is another set of data elements. For example, if a BPR was replaced, evidence of procurement was recorded. If a BPR was repaired, a list of coded programs and their placement into production were recorded. Budget information was collected. Estimates of hours of classified state time to complete a milestone plus estimates of the dollar cost of contractors, hardware and software were collected to provide Y2K budget estimates.

A database of business processes was used to track the priorities, Y2K risk and progress in Y2K activities. Now that the project is complete, artifacts of the Y2K Project are being used to prioritize and plan applications systems development.

## **Impact on the Process Organizational Performance (OUTCOMES)**

The BPR systems provided assessments of business processes, project cost benefit and a method for dividing a large project into a series of small, cost-effective, lower risk activities. Adding risk assessment and evaluation management data to the BPR system completes a Mission Focused Information Management tool for managing Information Technology resources.

It provided intangible benefits by educating staff on Information Technology (IT) projects and risk as a management tool. A tangible benefit, the Business Process Record (BPR) system, was adapted for system development projects. The BPR system casts change methods in terms of renovation, testing, implementation and contingency planning. It provides performance measures for procurement, customization, and budget as well as providing deadlines for each activity.

## **Best Practice Qualification**

It provided a successful Y2K Project and is being used for other systems development efforts.

## **For Additional Information**

Department of Rehabilitative Services  
P. O. Box K300  
8004 Franklin Farms Drive  
Richmond, VA 23288-0300

Ernest F. Steidle, Ph.D.  
(540) 332-7945  
[steidlef@drs.state.va.us](mailto:steidlef@drs.state.va.us)

Pat Herman  
Internal Audit  
(804) 662-7106  
[hermanpt@drs.state.va.us](mailto:hermanpt@drs.state.va.us)